REMARKS/ARGUMENTS

1. Summary of the Office Action

Claims 1-8 and 15-23 stand rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by U.S. Patent No. 6,553,408 (hereinafter Merrell).

Claims 9-14, 26 and 27 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by U.S. Patent No. 5,809,303 (hereinafter Senator).

Claims 24 and 25 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Merrell in view of U.S. Patent No. 6,714,992 (hereinafter Kanojia).

Claim 28 stands rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Senator in view of Kanojia.

2. Response to 35 U.S.C. § 102 Rejections

In response to the above Office Action, the Applicants have amended the claims and respectfully request reconsideration thereof. All the amendments are supported by the specification as originally filed and accordingly, no new matter has been added. Claims 9-14 have been canceled without prejudice.

To anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, USPQ2d 1051, 1053 (Fed. Cir. 1987).

Applicants contend that each and every element of the present claims is simply not found in Merrell. Merrell teaches a storage server architecture supporting virtual devices and virtual circuits for storing data. In particular, the Office Action relies on Merrell for the teaching of a SCSI target device driver for handling SCSI storage transactions (Col.18, lines 18-59).

However, Merrell fails to teach or suggest each and every element of the present amended claims. Specifically, the present claim includes the feature of "receiving from multiple

application programs executing within one or more computer environments, instructions intended for one or more target computer-based devices, said instructions being issued by the application programs in **high-level, non-target device specific formats** interpretable by a software communication portal receiving said instructions; translating, at the software communication portal, said instructions **from the high-level, non-target device specific formats to target device specific formats** appropriate for software drivers associated with respective ones of the target computer-based devices for which said instructions were intended and according to target computer-based device information specified in the instructions" (Claim 1; emphasis added). In contrast, Merrell teaches that the request is in device specific formats. For example, the "hardware device driver receives the storage transaction and depending on the protocol, dispatches it to an appropriate virtual device for handling that protocol. For example, SCSI storage transactions are sent to a device driver in the SCSI target class. Similarly, IP storage transactions are sent to a device driver in the IP target class. Here, the storage transaction was made using the SCSI communication protocol so it is routed to a SCSI target device driver (DID 500)" (Col.18, lines 20-29). It will be noted that the instructions issued by the application programs are target device specific, such as SCSI protocol or IP protocol. Consequently, Merrell teaches away from the present claim wherein the instructions issued by the application is in high-level, non-target device specific format. Therefore, claim 1 and its dependent claims are patentable over Merrell.

Independent claims 15 and 22 include the feature of instructions issued by the application programs are in high-level, non-target device specific formats. In view of the remarks above, it is also submitted that Merrell does not teach or even suggest each and every element of the claims. Accordingly, claims 15, 22 and their dependent claims are patentable over Merrell.

3. Response to 35 U.S.C. § 103 Rejections

Claims 24 and 25 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Merrell in view of Kanojia. Claim 28 stands rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Senator in view of Kanojia.

As established above, Merrell only teaches that application programs issue instructions in device specific formats. This contradicts with the present claims that uses "high-level, non-target device specific format" (Claims 1, 15 and 22). Therefore, Merrell fails to anticipate the present claims.

Even the additional teachings of Kanojia fail to rectify the deficiencies of Merrell. Kanojia discusses a communication and management system that dynamically targets network devices for content deployment, such as application programs, device drives, configuration files and registry subhives (Kanjoia, Abstract). However, Kanjoia uses a significantly different method for identifying the necessary device driver. In particular, Kanjoia describes a system "for driver installation on a network device over a data network. The system comprises a system agent that detects an **identification message** from a peripheral device when attached to the network device. Information concerning this message is then transferred to a system manager. The system manager **compares the information to a database of driver information** and notifies the network device regarding an appropriate driver for the peripheral device." (Kanjoia, Col.2, lines 44-53; emphasis added). It will be noted that Kanjoia is not concerned with translating the instructions from non-target device specific formats to target device specific formats. In contrast, Kanjoia uses the identification message which is a "plug-and-play string" from the peripheral device and compares the string to a database of strings for supported peripherals (Kanjoia, Col.2, lines 54-60). Hence, the present claims are patentable over Merrell in view of Kanojia.

Regarding Claim 28, Senator teaches a device input/output monitoring mechanism serving as an interface between a computer operating system kernel and a device driver which obviates the necessity of implementing specific pseudo-device drivers for various peripheral devices and provides a standard interface between a device and a computer operating system (Senator, Abstract). Similarly, Senator fails to teach the present claim of receiving high-level, non-target device specific format instructions and translating the instructions into target device specific format. Indeed, Senator teaches only a DDI/DKI interface which intercepts the communications between the kernel and the device driver so as to maintain input/output data to the KSTAT module. As illustrated in Figure 4, Senator states "the various calls which may be made through a standard DDI/DKI interface 28 associated with the operating system 20 kernel 26 are shown in conjunction with the pseudo-device driver 50 of the present invention. As an example, an operating system call 60 is issued which is intercepted by the pseudo-device driver

50 to make a call back 62 to the KSTAT module 46. The call 60 then proceeds through as a passed-through call 64 to the device driver 42. Likewise, a device call 66 is intercepted from the device driver 42 and, in response, a call to the KSTAT module 46 is issued by the pseudo-device driver at 68. The device call 66 is then passed through as a passed-through call 70" (Senator, Col.4, lines 31-44). It will be noted that Senator teaches only intercepting the communications kernel and the device driver. There is no mention of any translation of instructions from high-level, non-target device specific format into target device specific format.

Furthermore, the Office Action incorrectly asserts on Page 5, second paragraph that the call back (Senator, Col.6, line 27) is equivalent to the present claim wherein the information received from the device driver is translated into a high-level message format before being forwarded. This assertion finds no support in the specification. Specifically, Col.6, lines 26-27 of Senator states that "upon completion of the operation at (d), there is a call back made and it presents the data read from the mass storage device". Clearly, the call back merely presents the data read from the mass storage device to the kernel. Therefore, Senator fails to cure the deficiencies of Kanojia and the present claims are patentable over the cited references.

4. **Conclusion**

Having tendered the above remarks and amended the claims as indicated herein, the Applicants respectfully submit that all rejections have been addressed and that the claims are now in a condition for allowance, which is earnestly solicited.

If there are any additional charges, please charge Deposit Account No. 02-2666. If a telephone interview would in any way expedite the prosecution of the present application, the Examiner is invited to contact Jaina Chua at (408) 947-8200 ext 213.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

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Chze Koon Chua
Reg. No. 53,831

12400 Wilshire Blvd.
Seventh Floor
Los Angeles, CA 90025-1026
(408) 947-8200